



Wastewater

Purpose

Protection of the public and environmental health, through treatment of wastewater in selected areas.

Legislation associated with this service

- Local Government Act 2002
- The Health (Drinking Water) Amendment Act 2007
- Drinking-water Standards for New Zealand 2005 and 2018
- Resource Management Act 1991
- The Water Services Act 2021 and associated regulations
- Taumata Arowai – the Water Services Regulator Act 2020

Risks and issues

- Failure of a scheme due to the age of the assets, and the inaccessibility for inspections (pipes are underground so can be difficult to find and inspect adequately)
- New wastewater treatment plants will be required to cater for growth and meet current level of service
- Affordability, the cost to repair and provide service with ageing pipes coupled with small communities served by a scheme can push the expenses (and rates) out of reach for communities
- Higher environmental standards for discharge consents (treated wastewater released into harbours or rivers), will require communities to front the costs of upgrading treatment plants and reticulation to meet these standards






- Capacity capability needs to be in place ahead of expected development and growth in the serviced communities. This could be hindered by available funding and resource capacity if not planned appropriately, including specific capacity modelling for each plant
- Our Infrastructure Strategy assumes a continuation and expansion of land-based disposal options through increased efficiency and alternative disposal options, and
- Ongoing asset management condition and performance assessments required to prioritise maintenance and renewals.



What we do

We collect, treat, and dispose of wastewater through sustainable and cost-effective methods that consider environmental impacts and sensitivities in the serviced area. We own and operate wastewater schemes for Glinks Gully, Te Kōpuru, Dargaville, Maungatūroto, Kaiwaka and Mangawhai. We undertake asset management, planning, operation and maintenance of the wastewater schemes, capital and refurbishment programmes and consent monitoring and compliance, along with responsibility of professional and physical works undertaken on the network.



Contribution to community outcomes					
					
Manage our wastewater to minimise negative effects on the environment					
Manage growth and maintain current levels of service					
Manage our service to ensure communities and business are supported					

How is climate resilience being considered?

Environmental impacts are considered in the planning of all infrastructure activities. Tools used include hydraulic models that allow for scenario planning to plan and test solution design outcomes.

If average temperatures increase and rainfall patterns change, there may be increased pressure on treatment plants and on the wastewater network. Storm surges and increasing risk from coastal hazards may also impact Council's low-lying assets in the wastewater network. If these changes occur they may increase the risk of flooding and overflow due to increased inflow and infiltration. The impacts of recent events underpin the content of this LTP as we complete the recovery activities.

Discharge options and allowances are likely to change, and we will need to be adaptive and strategic to meet expected levels of service.

We have a responsibility to manage all these risks and protect the natural environment and our communities. We will continue to explore opportunities for innovation in our wastewater activities, including seeking out ways to manage inflows and infiltration during heavy rainfall.



What we will deliver, when

Description	2024/2025	2025/2026	2026/2027
Dargaville treatment plant and pumpstation upgrades			
Extend discharge field for Glinks Gully			
Mangawhai treatment plant and pumpstation capacity upgrades			
Mangawhai wastewater treated effluent disposal			
Mangawhai reticulation extensions upgrade			
Discharge consent renewal Maungatūroto railway village			
District-wide reticulation renewals			
Network models - wet weather overflow, demand management and environmental impact assessments			
Investigate the Paparoa wastewater issues raised in the submissions, engage with the effected property owners to assess the possibility of a wastewater solution, and report back to Council in September 2024.			

Performance measures	LTP Year 1 Target 2024/2025	LTP Year 2 Target 2025/2026	LTP Year 3 Target 2026/2027
The number of dry weather wastewater overflows from Council's wastewater systems, expressed per 1,000 wastewater connections to that wastewater system. The resource consent provides for severe weather events and power failure exceptions.	<1	<1	<1
Where Council attends to wastewater overflows resulting from a blockage or other fault in the territorial authority's wastewater system, the following median response times apply: Attendance time: from the time that the territorial authority receives notification to the time that service personnel reach the site. (Department of Internal Affairs measure)	≤2 hours	≤2 hours	≤2 hours
Where Council attends to wastewater overflows resulting from a blockage or other fault in the territorial authority's wastewater system, the following median response times apply: Resolution time: from the time that the territorial authority receives notification to the time that service personnel confirm resolution of the blockage or other fault.	≤48 hours	≤48 hours	≤48 hours
The total number of complaints received by Council about wastewater odour. Expressed per 1,000 wastewater connections.	≤10	≤10	≤10

Performance measures	LTP Year 1 Target 2024/2025	LTP Year 2 Target 2025/2026	LTP Year 3 Target 2026/2027
The total number of complaints received by Council about wastewater system faults e.g. blockages, breaks. Expressed per 1,000 wastewater connections.	≤25	≤24	≤23
The total number of complaints received by Council about Council's response to issues with its wastewater system. Expressed per 1,000 wastewater connections.	≤46	≤46	≤44
The number of abatement notices, infringement notices, enforcement orders and convictions received by Council in relation to its resource consents for discharge from its wastewater systems.	0	0	0
Major capital projects are completed within budget.	Achieved	Achieved	Achieved

Changes in levels of service

There will be no changes to the level of service.



Significant negative effects

Identified significant negative effect/issue	Mitigation
<p>Environmental health</p> <p>In case of failure or significant breakage, there could be contamination of public waterways which may have large environmental or personal health issues.</p>	<p>Remote monitoring and alarms are in place for operators to react quickly to contain any spillages.</p> <p>For pump stations - use sucker trucks.</p> <p>For pipe breakages - quick response and containment of spillage before it gets to waterways.</p>
<p>Renewals</p> <p>The rising cost of ongoing maintenance or pipe renewal may become economically unrealistic.</p>	<p>Use condition data to prioritise, apply competitive process per procurement guidelines, and group work activities by type or geography for efficiency.</p>
<p>Wastewater plants</p> <p>Failure of a wastewater treatment plant (WWTP) in meeting the resource consent may result in Northland Regional Council (NRC) issuing an infringement notice.</p>	<p>Ongoing close monitoring of performance and acting quickly to rectify.</p> <p>Continue to increase alarm points monitored by Supervisory Control and Data Acquisition (SCADA).</p> <p>Manage capacity through continued reduction of stormwater into the network.</p>
<p>Population growth</p> <p>Rapid growth requires infrastructure planning to remain ahead of this growth and maintain levels of service.</p>	<p>Growth projections are factored into current modelling that informs upgrades of reticulated wastewater network, wastewater treatment plant and disposal systems to increase capacity. Growth and its impacts on modelling are reviewed regularly.</p>

Prospective Funding Impact Statement

Wastewater	Annual Plan	Budget	Budget	Budget
For the year ended: 30 June	2023/2024 \$'000	2024/2025 \$'000	2025/2026 \$'000	2026/2027 \$'000
Sources of operating funding				
General rates, uniform annual general charges, rate penalties	1,031	613	479	495
Targeted rates	7,262	7,892	7,933	8,073
Subsidies and grants for operating purposes	0	0	0	0
Fees and charges	128	128	128	128
Internal charges and overheads recovered	0	0	0	0
Interest and dividends from investments	0	0	0	0
Local authorities fuel tax, fines, infringement fees and other receipts	0	0	0	0
Total operating funding	8,421	8,633	8,540	8,696
Application of operating funding				
Payments to staff and suppliers	2,821	2,862	2,983	2,995
Finance costs	1,966	2,258	1,852	1,820
Internal charges and overheads charged	1,917	1,316	1,311	1,266
Other operating funding applications	0	0	0	0
Total applications of operating funding	6,704	6,436	6,146	6,082
Surplus (deficit) of operating funding	1,717	2,196	2,394	2,615
Sources of capital funding				
Subsidies and grants for capital expenditure	0	1,049	0	0
Development and financial contributions	2,168	2,168	2,168	2,168
Increase (decrease) in debt	-255	-609	-577	-691
Gross proceeds from sale of assets	0	0	0	0
Lump sum contributions	0	0	0	0
Other dedicated capital funding	0	0	0	0
Total sources of capital funding	1,913	2,607	1,590	1,476
Applications of capital funding				
Capital expenditure	0	0	0	0
Capital expenditure - to meet additional demand	27	2,050	4,050	5,700
Capital expenditure - to improve the level of service	516	1,249	242	140
Capital expenditure - to replace existing assets	2,428	745	1,245	1,245
Increase (decrease) in reserves	659	759	-1,552	-2,994
Increase (decrease) of investments	0	0	0	0
Total applications of capital funding	3,630	4,803	3,985	4,091
Surplus (deficit) of capital funding	-1,717	-2,196	-2,395	-2,614
Funding Balance	0	0	0	0